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REMARKS

Claims 1-8, 12, 16-19 and 22 to 30 appear in this application.

The indication in the Office Action of October 6, 2004 of the allowance of claims 22 to 30 is noted with appreciation.

The only rejection remaining in the application is the 35 U.S.C. 102 (b) rejection of claims 1, 5 and 7 and the 35 U.S.C. 103 rejection of claims 2 and 3 over US Patent 4,933,371 to Hink et al. It is respectfully submitted that both of these two rejections are erroneous and not grounded in the facts as disclosed in the cited reference.

The USPTO has not disputed the facts that:

the thrust of the Hink et al. patent disclosure is directed to compositions for treating (killing) ticks and fleas with a toxic (insecticidal) amount of certain compositions that include linalool (col. 3, lines 9 to 12),

most of the portions of the patent cited in the Office Action relates to compositions for ticks and fleas,

the only cited portion of the reference relating to mosquitoes is at column 12, line 43 to column 13, line 20 and that this disclosure relates to **sprayable solutions** containing **large amounts** of linalool (2.5, 5 and 10% linalool) employed to **kill mosquitoes**.

Applicant's claimed compositions are different (patentably different) and unobvious from this disclosure. Applicant's compositions are not for killing mosquitoes. Rather, applicants composition are for dispensing into the atmosphere for inhibiting the scent

tracking ability of mosquitoes to track humans (as the claims of the present application clearly state). Nothing in the disclosure of Hinks et al. teaches anyone skilled in the art that linalool has this effect on the scent tracking ability of mosquitoes when relatively small amounts are dispensed into the atmosphere. Furthermore, the disclosure in Hink et al. of dips, concentrates and shampoos are all to compositions with relatively large amounts of linalool for contacting and killing the fleas, ticks and mosquitoes. As will be appreciated, the compositions of the present invention are not required to be, nor are they intended to be, sprayed onto mosquitoes. The compositions are compositions that are to be dispensed into the atmosphere to simply protect humans by having an atmosphere with dispensed linalool therein so that when mosquitoes enter the area they are unable to track humans. Thus, the disclosure in Hink et al. does not anticipate claims 1, 4, 5 and 7, nor render obvious claims 2 and 3.

Additionally, to meet the "base vehicle comprising a porous or waxy medium" limitation in the claims the PTO relies upon the sesame oil as being the waxy medium. As stated in Applicant's previous response Hink et al. does not employ sesame oil as a vehicle, but rather as an **insecticidal synergist**.

The PTO, instead of substantively responding to or attempting to refute these facts (which Applicants submit that the PTO refute), the PTO in the present Office Action merely erroneously indicates that:

"sesame oil is a fatty acid, and fatty acid is waxy", and

the prior art reads on the instant claims because "Examiner assumes that instant amounts of linalool can also be used to kill as well as prevent mosquitoes from tracking humans."

The PTO is in error in both of these contentions. Sesame oil is not a waxy medium. A wax is a solid medium and sesame oil is not a solid medium nor a wax..

Attached hereto is page 1233 of Hawley's Condensed Chemical Dictionary, Eleventh edition, (1987) wherein it clearly states that a wax is low-melting organic mixture or compound of high molecular weight, **solid at room temperature** and generally similar in composition to fats and oils **except that it contains no glycerides**. Sesame oil is neither a solid at room temperature nor is it free of glycerides. Thus, sesame oil is certainly not a waxy (solid) medium as requires by the instant claims.

The PTO Examiner is incorrect in his assumption that the amount of linalool employed in applicant's invention to inhibit the scent tracking ability of mosquitoes is also an amount that would kill mosquitoes and therefore would not be different from the prior art insecticidal amounts. That the Examiner's assumption is incorrect is shown by the data presented in the attached Declaration of Inventor Robert Bedoukian. In the data presented in the Declaration, it is demonstrated that an amount of linalool ($0.00169 \text{ g/hr/ft}^2$) that is over four times larger than the upper level amount of 0.0004 g/hr/ft^2 of the present invention still does not kill mosquitoes and therefore it is clear that the level of 0.0004 g/hr/ft^2 and below will not kill mosquitoes. Although amount of linalool of 0.0004 g/hr/ft^2 and below will not kill mosquitoes those amounts are effective to inhibit the scent tracking ability of mosquitoes. Since these amounts would not kill mosquitoes one skilled in the art, prior to Applicant's invention, would have had not incentive or reason to prepare compositions with such low levels of linalool, nor to prepare such compositions with such low levels of linalool in a waxy or porous medium wherein such compositions dispense into the atmosphere an "amount [of the inhibiting compound] sufficient to inhibit the scent tracking ability of mosquitoes to sense a target".

Therefore, it is clear from the record that the Hink et al. patent does not disclose, suggest or in any way render obvious the claimed compositions that are in a waxy or porous medium and that contain such low levels of the inhibiting compound so as to inhibit the scent tracking ability of mosquitoes, but not to kill mosquitoes. Thus, the section 102 rejection of claims 1, 4, 5 and 7 and the section 103 rejection of claims 2 and 3 are both

legally and factually erroneous. The PTO is therefore requested to reconsider and withdraw both rejection and allow these claims. Upon the allowance of these claims withdrawn claims 6, 8, 12, and 16-19 should be rejoined with the allowable generic claim.

It is respectfully submitted that the foregoing is a full and complete response to the Office Action and that all the claims are allowable for at least the reasons indicated. An early indication of their allowability by issuance of a Notice of Allowance is earnestly solicited.

In the event the Examiner deems desirable further or alternative clarifying language, the Examiner is respectfully requested to telephone Applicant's undersigned Attorney to obtain consent for such an amendment in order to expeditiously process this Application for allowance.

Respectfully submitted,

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Date: December 3, 2004

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: J. Nolen et al.

Serial No. 10/051,706

Title: METHOD, APPARATUS AND COMPOSITIONS FOR INHIBITING THE HUMAN SCENT TRACKING ABILITY OF MOSQUITOES IN ENVIRONMENTALLY DEFINED THREE DIMENSIONAL SPACES

Filed: January 17, 2002

Examiner: Alton Nathaniel Pryor

1. That I have read the Office Actions in the present application and understand that claims 1, 4, 5 and 7 are rejected under 35 U.S.C. 102 and claims 2 and 3 are rejected under 35 U.S.C. 103 over the disclosure in US Patent 6,362,235 of Hink et al.
2. I further understand that although the disclosure in the Hink et al. patent relates to compositions with large amounts of linalool for killing mosquitoes and not to compositions with much smaller amounts of linalool for inhibiting the scent tracking ability of mosquitoes, the PTO has maintained the rejections based on the assumption of the Examiner that "Examiner assumes that instant amounts of linalool can also be used to kill as well as prevent mosquitoes from tracking humans."
3. That I knew this assumption of the Examiner to be erroneous and therefore, on behalf of the applicant inventors, the following demonstration was undertaken.
4. Ten *Aedes aegypti* mosquitoes were used as subjects. Five mosquitoes were aspirated into each of two 4x4x5 cm Plexiglass chambers. Fifty microliters (50 μ l) of 0.006M linalool solution in acetone were applied to each of two 9.6 cm^2 silicone membranes. A treated silicone membrane was placed into each chamber and the five mosquitoes in each membrane were exposed to the linalool from the linalool treated membrane in the chamber for a period of one hour.
5. After one hour of exposure to the linalool all ten mosquitoes in the two chambers were healthy—crawling, flying or perched on the chamber walls,
6. The amount of linalool to which the mosquitoes in each chamber were exposed was an amount of 0.00169 g/hr/ft². The 0.00169 g/hr/ft² is based on 0.006M (152 g/mole = 0.912 grams linalool/liter) linalool times 50 μ l = 0.0000456 g linalool divided by the 0.0269 ft² (25 cm^2) floor of the chamber. This 0.00169